



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,792	01/18/2002	Steven A. Thiel	10541/1074	7451
29074	7590	08/20/2004		
VISTEON C/O BRINKS HOFER GILSON & LIONE PO BOX 10395 CHICAGO, IL 60610			EXAMINER PIAZZA CORCORAN, GLADYS JOSEFINA	
			ART UNIT 1733	PAPER NUMBER

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,792

Applicant(s)

THIEL ET AL.

Examiner

Gladys J Piazza Corcoran

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,5,9,10 and 12 is/are rejected.
- 7) ☐ Claim(s) 2,3 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

FINAL ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 5, 9, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth US Patent No. (6,179,145) in view of Walter (WO 00/56564 with US Patent No. 6,606,980 as the English equivalent) as set forth in paragraph 4 of the previous Office Action filed on March 4, 2004.

As to the newly added limitation that the sealing step is after the fixing step, Roth discloses that the internal components of the fuel tank are disposed between the half shells prior to sealing (column 3, lines 23-27).

Roth discloses a method for assembling a fuel delivery system by thermoforming a first shell portion (14) and a second shell portion (16) of a fuel tank (10) (column 2, lines 34-59; column 3, lines 23-25), forming a fuel tank access aperture (opening 56) in at least one of said first and second shell portions for allowing access to components within the tank (column 3, lines 30-36), and sealingly connecting said first and second shell portions to form a fuel tank to enclose the components within said fuel tank (column 3, lines 26-27).

Roth discloses that components (including pumps) are disposed within the tank prior to welding shut the two shell portions, and shows annular wall 21 to form a reservoir, however it is unclear how the reservoir is formed and fixed to the bottom shell 14. It is considered well known in the art to fixedly attach reservoir assemblies with reservoir units within fuel tanks in order to have continuous flow of the fuel even during tilting of the tank. For example, Walter discloses providing a reservoir assembly having a reservoir unit (12) and fixing said reservoir assembly to the bottom wall of the tank (the unit is fixed to the shell by being held within holding unit 30; column 4, lines 23-30) in order to provide fuel to the pump during extreme operating positions of the motor (column 1, lines 1-55). Furthermore, the reservoir unit in Walter also provides for closed tops in order to prevent sloshing of the fuel (column 2, lines 45-50). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming a fuel delivery system as shown by Roth with a reservoir unit fixed to one of the shells in order to provide fuel at the fuel intake opening of the fuel pump even

in extreme operating states of the motor vehicle and covered tops in order to prevent sloshing as shown by Walter.

As to claim 9, Roth discloses a plurality of thermoformed shell portions (14 and 16) for a fuel tank (10), with at least one having a fuel tank access aperture (opening 56) and Walter as discussed above discloses a non-integral reservoir assembly comprising a reservoir unit (12) having its smallest cross-sectional area being greater than the area of the fuel tank access aperture with the assembly configured to store fuel and being attached to one of the shell portions inside the fuel tank. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tank in Roth with a reservoir having its smallest cross-sectional area being greater than the area of the fuel tank access aperture in order to provide fuel to the pump when the tank is in extreme operating states as shown by Walter particularly since the components are applied prior to sealing the shells in Roth, only the expected results would be attained.

As to claims 5 and 12, Roth discloses providing a cover (sealing cover 58), removably securing the cover to the first or second shell for sealing the fuel tank, and removing the cover after the first and second shell portions are connected together to allow access to the components in the tank. The cover in Roth seals the aperture from the outside of the tank. However, it is well known in the art to provide covers such as flanges that are disposed within the fuel tank access aperture. For example, Walter discloses one such example, cover 18. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming the fuel delivery system as shown by Roth by providing a flange disposed within the aperture as

a well known equivalent alternate to an outer cover as is considered well known in the art and exemplified by Walter, only the expected results would be attained.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roth in view of Walter as applied to claim 9 above, and further in view of Tuckey (US Patent No. 6,012,904) as set forth in paragraph 6 of the previous Office Action filed on March 4, 2004.

Roth discloses the reservoir assembly comprises a fuel pump (32), a fuel level sensor (float 40, arm 42, and level 44), inline fuel filter assembly (strainer 34), an auxiliary pump (jet pump), and a pressure regulator assembly (vent valve) (column 2, line 59 to column 3, line 5). Walter discloses a fuel pump (134) and inline fuel filter assembly (152, 127), and Walter discloses the importance of providing at least partial closure of the tops of the reservoir assembly to prevent sloshing (column 2, lines 45-50, however does not particularly disclose a reservoir cover. It is well known in the art to provide the claims items in a reservoir system. For example, Tuckey discloses providing a reservoir assembly for fuel tank with an auxiliary pump (152), a fuel pump (62), a reservoir cover (90), an inline fuel filter assembly (140), a fuel pressure regulator assembly (valve column 2, lines 52-64), and a level sensor assembly (126) mounted to the reservoir unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the fuel delivery system as shown by Roth and Walter with conventional reservoir assembly parts in particular a cover in order to provide the proper functions of the system including preventing sloshing of the fuel out of the

system as is well known in the art and further exemplified by Tuckey, only the expected results would be attained.

Response to Amendment

5. The evidence and statement of common ownership is sufficient to overcome the 35 USC 103 rejection based on the reference Vorenkamp et al. (US 2002/0020487).

Allowable Subject Matter

6. Claims 2, 3, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: Absent any additional prior art, no prior art was found to show or suggest 1) fixing a reservoir assembly by using a plurality of weld feet in environment of the method as claimed in claim 1 nor 2) a fuel delivery system with a plurality of heat deformable weld feet where the reservoir assembly is attached to at least one of the shell portions using the weld feet in the environment of the fuel delivery system as claimed in claim 9.

Response to Arguments

8. Applicant's arguments filed on June 4, 2004 have been fully considered but they are not persuasive.

Applicant argues on page 4 that Walter teaches a blow molded tank assembly and not a tank assembly with a first and second shell portion and that it is imperative that the components of the reservoir be dimensioned to fit within the opening of the

tank. The rejection is based on Roth in view of Walter, where Roth discloses the method that the two halves of the fuel tank are thermoformed, then the internal components are positioned between the two halves, then the halves are sealed. Walter is cited merely to show an example in the art where it is known to fix or attach a reservoir assembly to the wall of the fuel tank in order to provide fuel to the fuel pump in extreme conditions. Consequently, it would have been obvious to one of ordinary skill in the art at the time of the invention practicing the method of forming the fuel tank in Roth to fix the reservoir assembly to the wall of the fuel tank at the step of positioning the internal components between the two halves in order to secure the reservoir assembly to the tank and provide an assembly such that fuel will be provided to the fuel pump in extreme conditions.

Applicant argues on page 5 that the Roth reservoir tank is unitary with the bottom wall of the tank and that Walter teaches that each of the modules of the reservoir assembly is connected to each other inside the already sealed tank. It is unclear how the reservoir in Roth is attached to the fuel tank. However, Roth does disclose that the internal components of the fuel tank are positioned between the halves of the fuel tank prior to sealing (column 3, lines 23-27). Walter discloses a method of fixing a reservoir assembly to the wall of a fuel tank in order to provide the fuel pump with fuel in extreme conditions. It is irrelevant when the reservoir assembly in Walter is attached to the fuel tank because one practicing the method of Roth would position the internal components of the fuel tank prior to sealing as disclosed in column 3, lines 23-27. Additionally, it is

noted that Walter recognizes insertion during the production procedure of the fuel tank (column 1, lines 19-23; column 2, lines 4-5).

Applicant argues on page 5 that Walter does not teach attaching the reservoir assembly to the thermoformed shell. The reservoir assembly in Walter is positioned within the fuel tank in a holder on the shell wall (column 4, lines 23-30). Consequently, the reservoir assembly in Walter reads on the broadest interpretation of being "attached" as currently claimed.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

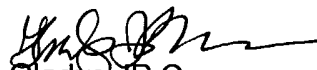
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is

Art Unit: 1733

(571) 272-1214. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gladys JP Corcoran
Primary Examiner
Art Unit 1733

GJPC